R E P O R T R E S U M E S

ED 015 587 EC 000 786

EXPLORATORY STUDY OF THE EFFECTS OF INDIVIDUAL WORK ON THE FUNCTIONING OF MALADJUSTED PRE-SCHOOL CHILDREN.

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PUB DATE 13 MAR 65

EDRS PRICE MF-$0.25 HC-$0.44 9P.

DESCRIPTORS- *EXCEPTIONAL CHILD RESEARCH, *EMOTIONALLY DISTURBED, *REINFORCEMENT, *BEHAVIOR, SOCIALLY MALADJUSTED, OPERANT CONDITIONING, BEHAVIOR CHANGE, CHILDREN, EDUCATIONAL RESEARCH, INDIVIDUAL NEEDS, LEARNING ACTIVITIES, LEARNING EXPERIENCE, LEARNING THEORIES, PRESCHOOL CHILDREN, SOCIALLY DEVIANT BEHAVIOR,

THIS PAPER IS A REPORT OF AN EXPLORATORY STUDY OF THE APPLICABILITY OF A 3-LEVEL THEORY OF LEARNING WHEN USED AS A FRAMEWORK FOR EMOTIONAL-SOCIAL LEARNING. SOCIALLY HOSTILE PRESCHOOL CHILDREN WERE TO BE PLEASURABLY REINFORCED FOR DESIRABLE ACTIVITIES, HELPED TO SEE THE RELATIONSHIP BETWEEN THE PLEASURE AND THE ACTIVITIES, AND FINALLY TO SEE THEMSELVES AS THE KIND OF A PERSON WHO OPERATES IN A DESIRABLE MANNER. CASE STUDIES OF PRELIMINARY WORK WITH FIVE CHILDREN ARE PRESENTED. RESULTS INDICATE THAT THE PROGRAM WAS A PROBABLE, BUT UNPROVEN SUCCESS AND THAT THE IDEAS ARE WORTHY OF FURTHER RESEARCH. (RS)

ED015587

EC 000 786

Exploratory Study of the Effects of Individual Work on the Functioning of Maladjusted Pre-School Children

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A Paper Presented to the California Educational Research Association
Santa Rosa, March 13, 1965

Background:

This paper is a report of an exploratory study of the applicability of a three-level theory of learning when used as a framework for emotional-social learning. The theory has formed the basis for the development of the Kindergarten Evaluation of Learning Potential. These materials are being used for both teaching and evaluation in the kindergarten. They probe the child's ability to function on the conceptualization and self-directing creative levels as well as on the association level of the cognitive domain. In exploring the fundamental nature of the creative act the probability emerged that creativity involved the wedding of concept formation with motivation to continue a line of activity, usually with variations. Olds'(1956) work on the pleasure centers of the brain led to the hypothesis that circuits through one of these centers were basic to motivation to continue an activity.

This line of reasoning led to the development of an hypothesis related to emotional-social learning. The thesis is as follows: Certain desirable activities, from the observer's point of view, can be associated with pleasure by linking the manifestation of the activity with pleasurable reinforcement; when the linkage is sufficiently well developed a person can be helped to see the relationship between the pleasure and the kind of activities related to it. With some assistance the person can be freed to look at himself and, hopefully, to see himself as the kind of person who does the sort of things that are emotionally mature and socially desirable. The author was acutely aware of the possibility that as a person is freed to look at himself and to choose consciously a relationship of himself to the world, he may choose undesirable as well as desirable roles. The chosen, conceptualized self-concept will be stable and enduring and difficult to modify from the outside.

The model presented is the same as that for the cognitive structure. There is an association level with conditioning the vehicle, a conceptualization of relationships, and a third level of creative self-direction.

Once the model was constructed a number of possibilities to test it came to mind. The one selected was to take socially hostile pre-school children, operantly condition them as they moved toward socially desirable patterns of behavior, help them to conceptualize the relationship between doing socially desirable things and pleasing kinds of responses from other

people, and finally free the child to see himself, hopefully, as the kind of a person who does the socially desirable things as a matter of choice.

During the course of this study the author has been comforted by Skinner's (1959) thesis that psychological experimentation should have freedom to follow the by-paths and that often it is from these by-paths the new and important insights come. Skinner was writing of the kinds of discoveries he made when machinery broke down, or became too cumbersome to operate, accidents that caused him to try new tacks that had not been planned. There have been numerous unplanned variations as the present study has progressed.

The Original Design:

As the study was originally conceived three socially hostile four-year old children would be selected, three college students would work with these children reinforcing them for each step toward socially acceptable behavior, and three other students would record the interaction and the progress.

As the experiment proceeded, the students would lead the youngsters into the formation of a concept of the relationship between desirable behavior and pleasant experiences and finally into a self-concept as the kind of youngster who operates in this desirable manner. The original plan was to have the children brought to the nursery school on the campus of the University.

The Search for the Children:

The study was explained to the students in the author's class in Educational Psychology. The students were asked if any of them knew any socially hostile children of the right age and also if any of them had the time and the inclination to work on the project. Names of children were suggested and a number of students indicated willingness to work on the project. The children suggested were not enrolled primarily because their parents did not consider them to be socially hostile.

Two large school systems near the University were contacted with the idea that younger brothers or sisters of children who were problems in school might be located. This search proved fruitless. The Family Service Agency had all of their social case workers consider the young children in the families with whom they worked; and one child, not quite as specified, was located. The Catholic Welfare Bureau was contacted and three children were located, two of whom were selected. The third was considered too young. One of the social workers remarked that parents do not identify their children in terms of social hostility until immediately before they enter kindergarten at which time some of them become panicky.

The Children Selected:

Of the three children finally selected two were three years old; one of them was mentally retarded and one was crippled with club feet. The third was a four-year old from a family with a more than generous amount of maladaptation to school and juvenile authority. All three were from Mexican-American families who had to depend on bus service or walking for

transportation. Later two brothers were added to the group chiefly as models. One was three and the other five. Because of the transportation problem it was decided to hold the sessions at a kindergarten playground near the homes rather than on campus.

The College Students:

Four students from the author's class in Educational Psychology were able to fit the time into their schedules. Three of these were men, a graduate student in mathematics, a graduate student in sociology, and a senior in political science. The lone girl was a junior in history. Later her roommate, a junior in sociology, joined the group. All of the college students are planning to become secondary or college teachers although the work with the very young has made some of them consider opportunities for service in the elementary schools.

The Actual Program:

Individual goals were worked out for each of the children. These will be detailed in the case studies. The emphasis on the activities was on making all of the experiences happy ones. Perhaps because of the youth of the children, developmental steps were built slowly and the separation into reinforcers and observers proved unnecessary. It was quite possible for the reinforcers to record the interaction as it occurred. The fact that there were frequently two or three children and two or three adults operating as a group in an area such as a swing emphasized the opportunities for both observing and reinforcing.

The whole operation turned out to be reinforcing to the children. It was possible to emphasize the reinforcement as a youngster climbed an extra step up a slide, but this was from a general level of encouragement and praise and not from a neutral or hostile "normal" level.

In addition to the swings, slide, and jungle gym of the playground the equipment included a wagon, a tunnel, a folding table and chairs, a picture dictionary and other books, a ball, a doll, a bolt board, plastic colored shapes for building designs, a playschool form board, a bead design set, a block design set, an auditory perception kit, simple jig-saw puzzles, crayons and coloring books. Trips to the beach, the wharf, the breakwater, the zoo at the Child's Estate, the Bird Refuge, and the Museum of Natural History were made to expand the children's experiences.

The author picked up three of the children and drove them to the school. The two brothers were brought by their mother. The class met Mondays and Wednesdays from three to four. The youngsters engaged in a variety of activities with a mixture of direction from the adults and freedom of choice by the children setting the stage as to what the sequence and the activities would be. With a one-to-one ratio of teachers to children, great freedom and flexibility were possible.

Case Histories:

Y is a little girl of three who came immediately to the mind of the social worker as a case that needed help. Some quotes from the report of a

psychologist who examined her indicate some of her problems about four months before she entered the program.

> "Y has not learned much self-control. She cried and kicked a great deal. Her speech is a series of garbled mutterings. Occasionally she calls for Daddy, for Mamma, and says, 'Go, go.'
>
> . . .She tore up everything. . .except the books. These she fondled and was most careful in turning each page. . .Y is not toilet trained . . .She easily resorts to tears if she does not get her own way. She had a severe temper tantrum in the office. There is much bizarre behavior. . . . A quick evaluation with the Vineland Social Maturity Scale was attempted....an age equivalent of 1.3 with a social quotient of 45. Neither score should be taken as more than an indication of Y's current degree of handicap.
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> A paragraph from a report to the County Health Department by her pediatrician throws some additional light on her problems.
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> "I saw Y again on 26 December 1964, my last contact with her. Mrs. M. told me that she had been doing well with Dr. Wilson and was doing somewhat better at home since the administration of the Thorazine syrup. She did, however, still pick on the other children and had a somewhat uncontrollable temper, yawling and screaming. Her speech was very limited...still had her original problems which I suppose could best be interpreted as brain damage with behavior and emotional disturbances associated with her microcephaly. I recommended that she continue her Thorazine and continue the program which had been started with Dr. Wilson.

In our contacts with Y she has not shown any of the more overt symptoms mentioned in the psychologist's report. This restraint on her part was probably due to a complete lack of pressure on the teacher's part to do anything she would not accept gladly. The problem as far as treatment was concerned was to establish contact with her. She would sit on the swings and could be induced to climb the slide, and she would sit with one of the workers while she read a story although the sitting seemed more important than the story. In the car she sat passively with no apparent interest in the passing world. She did come out of the house to go on the journeys to school with apparent enthusiasm. Her physical coordination seems good. The author contacted the pediatrician to see if the Thorazine could be the cause of her lack of any spontaneous activity of an exploratory kind. The pediatrician assured the author that this would not be a likely effect and that in his opinion this was the little girl's natural response to the environment.

During the first two months progress seemed slow although there were increasing signs of pleasure during the sessions and increasing participation in the group activities. These gains were sufficient to be reinforcing to the workers but were not very great.

The report for January 15, which involved a trip to the Bird Refuge to feed the birds that crowd around the people, included these remarks. "Got into car by herself. Ate the food for the birds rather than feeding them. Was

a fairly active participator - tended to try to get into water and mud. On the way home sat up and took notice of what was going on to a much greater extent than is normally the case."

Her alertness and attention to the world around her has been a noticeable factor in her interaction with the world outside herself since that turning point.

In her last session she interacted in the wagon with the three-year old boy and gave evidences of enjoying the joint venture. She would climb up the slide, actively, to try to reach a small book held above her and treated the experience as a game. She says a few words but still does not talk.

In an interview with the parents they noted the following changes in Y. "She is more alert, more understanding, talks a bit, doesn't fight as much with the other kids who get along better with her too". In answer to a question as to whether they had seen anything that indicated the work with us had been helpful, they said she could now be alone on her own which formerly was impossible, that on a trip to the Bird Refuge she was not afraid of the birds and fed them which she had not done before and that now she goes to bed by herself on her own initiative. She looks forward to the sessions and runs to meet the author when he comes to pick her up. The parents are convinced that the experience has been very beneficial to her.

The goal set at the beginning for work with Y was to bring her into active contact with the world and to help her develop her speech. In four months work substantial progress seems to have been made in the former but not a great deal in the latter. There are evidences that she accepts herself better than she did previously. What will the next three months show in the way of progress?

B is a 3½-year old boy born with severe deformities in both feet; these required almost continual medical and surgical care from his birth until about six months ago. He was fortunate to have a physician who took a personal interest in him through the Crippled Children's Service of the County Health Department and through a similar service while he was in an eastern state. The family life was quite unsatisfactory until he was placed in a foster home at about the time we started working with him. As could be expected his natural mother was concerned about his health and fell into a pattern of behavior that, in effect, kept him a baby and a doll. She has had serious problems in her own adjustment including occasional drinking bouts. The foster parents have four children of their own all of whom are in school. B is accepted by all of the family very well. He is required to try to do things for himself, but the foster father talks to him, teaches him, massages his legs, takes him out to the store, and generally seems to be a very good developmental influence on him. The improvements in B may be much more attributable to the new home environment than to the school sessions although it is probable they have been mutually reinforcing. The goal set for B was to function more efficiently in a physical sense and to learn to talk.

B had only been walking for six weeks when he joined the program. His natural mother accompanied him to the first session and found it difficult to watch him stumble and fall and get rather muddy as he tried to play on the swings. (It had been raining).

In his first session he would sit on a swing and let go with no apparent awareness of the possibility of falling. He did the same sort of thing as he was assisted to climb up a slide. In early sessions he had a tendency to throw a bit of a temper tantrum if he did not get what he wanted right away.

He has progressed steadily in his physical control and development. In the last session he was running around to climb the steps to the slide and in one instance tried climbing around Y when she was going too slowly for him. He walks and picks himself up when he stumbles which he does rather regularly. He has a considerable vocabulary although he does not talk a great deal. He has a great curiosity about the way things work. He opens the door of the glove compartment of the car and is not above trying to turn the switches and levers. He has been allowed to explore in these directions as far as safety permitted and accepts the prohibitions as these come along.

His foster parents think the school experience has been good for him. They see him as happier and more cooperative as a result of the experience. There is a natural difficulty to disentangle the progress he has made and assign credit to the home and credit to the school. B has come a long way. He is still behind the average child of his age in almost all ways, but he seems to be catching up. If he continues to have a warm reinforcing environment that is, at the same time,demanding performance from him, he should become a useful member of society.

F is a boy who has just turned five. He comes to us from a family of nine children ranging in age from 18 down to a brother two years younger than F. The oldest brother is in a work experience program for MR and has been in difficulties with the juvenile authorities as have the two oldest girls. All except one of the rest of the children have had difficulties in school adjustment. The father, a barber in a non-union shop, wears a hearing aid which he is reported to turn off when things get too noisy for him. The mother is an earnest hardworking woman who has almost no control over the children. The children have a very high record of days absent from school. This characteristic has been in evidence as far as F is concerned but the reason has always been that he had a cold or bronchitis.

The goal set for F was to have him like school and to think of himself as a successful school participant.

He has worked with boltboards, bead designs, jigsaw puzzles, block designs, number boards, coloring books, form boards, and other individual activities as well as playing with the wagon, the tunnel, swings, slide, and jungle gym. From the first he has demonstrated good motor coordination and at least average mental ability. He has also shown himself to be a sensitive child who withdraws into himself at times but also shyly comes out to bask in praise for successes. He has found the contacts with T and M rewarding and

stimulating. They have served as a model for him in a number of ways. He tends to be fearful of new experiences. He was concerned as he walked along the breakwater until he found the sea was not unpredictable; he was frightened of the birds at the bird refuge until he found he could chase them and they would run; he was fearful of dogs and even of a puppy that was brought to school. This fear he still has.

He has developed awareness of some social amenities. He now says "please" and is quite concerned about the well being of the children younger than he is. One day recently he walked around inside the kindergarten room with one of the workers - this has been forbidden territory - and remarked that he would be glad when he could do a number of the things he saw had been done in the room. To a question as to whether he thought he would like to be a teacher when he grew up he replied strongly in the affirmative. It seems as though he is associating the idea of school with desirable and pleasurable things.

In an interview his parents thought that the experience had been very good for F although it was impossible to get a more specific response than that he was always anxious to go even when he had to be kept home because of illness, and the fact that he was trying to get the four-year old girl next door to come to school with him.

M and T are two brothers who were brought into the program to act as models and playmates chiefly for F. The home is warm and friendly. The parents are well educated and concerned about the development of their children and of the development of children generally. M seems somewhat more introverted and somewhat less well coordinated than do his three brothers. To the workers he appeared to be suffering from a bit of an inferiority complex, and it was hoped his experience could be good for him as well as his influence being good for the other children. He has worked with all of the materials and apparatus and seems to some of the workers to have increased in his self-assurance and probably in his self-acceptance. Perhaps he has measured himself against F and B and found that he was better than he thought he was. None of this change was apparent in an interview with the parents, but the effects of some of the activities on his home activities were noticed. To the workers T appeared to be a very well adjusted little 3-year old who did not appear to have a problem of any kind. It was hoped the experience would be good for him, but there was no particular focus in the activities as far as the workers were concerned. In an interview with the parents he was seen to have made considerable gains in self-confidence and to have developed in the ways the workers had seen as particularly true of his older brother.

Summary and Conclusions:

Of the students who started the fall semester all but one found it possible to continue the project into the second semester. They have found the experience particularly helpful in understanding the slowness of some changes, the rewards that small successes bring, and the importance of work of this kind with children.

There are no clearcut differences of means that can be pointed to as evidence that a measurable success has been achieved. The growth that has occurred has been partly due to forces other than those in the project; the use of Thorazine, the foster family, and normal growth and development of the children are some of the more obvious extraneous factors. However, there are some overt signs that some successes may be apparent to outside observers. As a result of this work the author has been asked to serve on the board of directors for a nursery school project for children of hard core welfare cases, he has been asked to serve on the board of directors for a special school for the "troublesome ten percent", and he has been asked to do something for a firstgrader who was having serious adjustment problems. The worker who could not fit the new semester into her schedule is going to pick up this latter chore. The author has also been asked to sit in on a traveling clinic for diagnosis and prescription of treatment for mentally retarded children. In other words, the personnel of the agencies who helped to locate the children have seen evidence that led them to ask for more of the kind of service the project has given.

Under the circumstances the basic ideas seem worthy of further exploration and trial in other circumstances. An evaluation might be, "Program a probable but unproven success".

BIBLIOGRAPHY

Olds, J., Pleasure Centers of the Brain. Scientific American, October, 1956, pp. 105-116.

Skinner, B.F., A Case History of Scientific Method in Psychology: A Study of a Science. Vol. 2. Sigmund Koch (ed.), McGraw-Hill, 1959, N.Y., pp. 359-379.